

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/007798 A2

(51) International Patent Classification⁷: **C12N**

(21) International Application Number:
PCT/IB2004/052127

(22) International Filing Date: 15 July 2004 (15.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PV 2003-1950 16 July 2003 (16.07.2003) CZ

(71) Applicants (for all designated States except US): ÚSTAV
MAKROMOLEKULÁRNÍ CHEMIE AVCR [CZ/CZ];
Heyrovského nám.2, 162 00 Praha 6 (CZ). MIKROBIO-
LOGICKÝ ÚSTAV AVCR [CZ/CZ]; Vídenská 1083, 142
20 Praha 4 (CZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SUBR, Vladimír
[CZ/CZ]; Otakara Johna 1643, 276 01 Mělník (CZ).
ULBRICH, Karel [CZ/CZ]; Horáckova 8/928, 140 00
Praha 4 (CZ). RÍHOVÁ, Blanka [CZ/CZ]; Pod Terebkou
11, 140 00 Praha 4 (CZ).

(74) Agent: SEMBEROVA, Dana; Patentové a licenční služby
SSC AVCR, Politických vězňů 7, 111 21 Praha 1 (CZ).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AI., AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DI., DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: REACTIVE POLYMERS AND COPOLYMERS, METHOD OF THEIR PREPARATION AND THEIR USE

(57) Abstract: The solution concerns reactive polymers and copolymers based on N-(2-hydroxypropyl)methacrylamide, which con-
tain reactive thiazolidine-2-thione groups in side chains of the polymers or at the ends of polymer chains. The solution also includes
a method of their preparation and their use for synthesis of polymer drugs and conjugates with proteins and preparation of gene
delivery systems.

WO 2005/007798 A2